

REMARKS

The specification has been amended to cure certain typographical errors noted in reviewing the application for the purpose of preparing this response. No new matter is added by way of these amendments.

As amended, this application now contains claims 19-22, 25-27, 29, 31, 37, 40-43, 46, and new claims 54-58. Claims 19, 37 and new claims 54-58 are presented in independent form. As regards the new claims, claims 54-57 are independent versions of former dependent claims 28, 30, 44 and 45, respectively. In the Office Action of May 23, 1994, these dependent claims were deemed allowable if presented in independent form. Thus, as presented, new claims 54-57 should be in condition for allowance, and the former dependent claims 28, 30, 54 and 55 have been canceled. New claim 58 is a method claim similar in scope to that of independent apparatus claim 37.

As regards claim 19 and those claims dependent thereon (i.e., claims 20-22, 25-27, 29 and 31), all of these claims are directed to the feature of manipulating a plurality of images displayed on a like plurality of display screen sections so that all of the displayed images are "manipulated in the same way at the same time" in response to "a single user command."

In rejecting claim 19 under 35 U.S.C. 103, the Examiner has combined the respective disclosures of U.S. 5,218,455 (Kristy) and EP 400,503 (Sato et al.). The Examiner takes the position that Kristy discloses everything recited in claim 19 except for the screen segmenting feature, and this aspect, according to the Examiner, is disclosed by Sato et al. Since the entire method of claim 19 relates to displaying and manipulating plural images on a single display screen, applicants respectfully disagree with the Examiner's assessment of Kristy. The Examiner further states that Sato et al. teaches (referring to FIG. 6) the feature of manipulating plural displayed images in response to a single user command, whereby each selected image is manipulated in the

same way and at the same time. But Sato et al. does not, in the opinion of applicant, teach or suggest this key feature. On the contrary, Sato et al. teaches just the opposite, namely, that each of the plural images are manipulated "independently" of the other images simultaneously displayed. (See col. 6, lines 4-8). Clearly, in order to manipulate images independently, a separate set of user commands must be provided for each image. Since claim 19 and those claims depending thereon all recite that a *single* user command effects a manipulation of each of a plurality of selected images *in the same way and at the same time*, these claims should be patentable over the combined disclosures of Kristy and Sato et al. since neither of these references in any way suggest this feature. As noted on pages 21 and 22 of applicants' specification, this feature affords significant advantages in the medical field, for example, where it is desirable to magnify two images equally and at the same time.

As regards the patentability of claims 37, 40-43, 46 and 58, these claims are directed to the feature of reducing the access time to display input images that are sequentially adjacent to a selected image. This is achieved by providing a plurality of image memories that are adapted to store digitized image data read from the data base and, in response to a single read command reading into image data files a plurality of files that represent not only a desired image for display, but also one or more "sequentially adjacent" images, the theory being that the next image to be requested for display is *likely* to be one that is "sequentially adjacent" (e.g., in the order in which the images were input to the database, or an order programmed by the user). If it turns out that the user wishes the next image to be displayed to be a non-sequentially adjacent image, then this feature has no value. However, experience shows that, more often than not, the next image selected for display will be sequentially adjacent to the one being displayed, and the access time can be dramatically reduced, between from 1 and 4 seconds to about 1/30 second.

In rejecting claim 37 under Section 103, the Examiner relies again on the

combined disclosure of Kristy and Sato et al. The Examiner states that Kato et al. teaches that the "access time to display the sequentially adjacent image file pursuant to said subsequent user command is shortened." The Examiner refers specifically to the abstract of Sato et al. Applicant has carefully reviewed the abstract and fails to see anything therein that would remotely suggest the subject matter of claim 37 and the new method claim 58. In Sato et al.'s "high speed search system" the images called up from the optical or magnetic disks are immediately displayed onto either the entire display screen or a portion thereof. Sato et al. never hold an image in memory waiting for the user to request it; rather, Sato et al. always waits for the image to be requested, loads it in memory and then immediately displays it. Note, in Sato's "page turning" or "file turning" modes, image are called up quickly and displayed, one after another. Once the user issues the "page turning" command, many images may be displayed before the user issues the "stop" command. However, Sato et al. never teaches the concept of retrieving an image which the user *may* want to display in the future; rather, Sato et al. just keeps retrieving and immediately displaying the next page until the stop command is chosen.

For example, in FIGS. 11A and 11B, Sato et al. shows the full screen display mode. As described in column 10, starting at lines 46, once the record numbers of files being search are stored in the main memory (ST 20), an image is read from the optical disk (ST 22). Next, the screen display mode is checked (ST 24). In the one-screen mode, the image read from the disk is immediately displayed. Assuming the user has not issued a stop command (ST 25), the next image is read (ST 22) and is immediately displayed (ST 24), and the process is repeated.

To even better distinguish the invention of claim 37 from Sato et al., applicants have amended claim 37 to make it clearer that the sequentially adjacent image(s) are not displayed until the succeeding user command is issued.

Claims 40-43 and 46, being dependent on claim 37 and reciting additional

features of preferred embodiments, should be allowed if only for the same reason that claim 37 is allowed.

In view of the foregoing amendments and remarks, applicants respectfully submit that this application should be in condition for allowance. In the event the Examiner would wish to discuss any aspect of this application with applicants' attorney, the latter may be reached by phone at 716-722-2396.

Respectfully submitted,



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